

Technical Supplement: Small and Rural Emergency Department Patient Survey, 2015-16

November 2017

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Please note that there is the potential for minor revisions of data in this report. Please check the online version at bhi.nsw.gov.au for any amendments

The NSW Patient Survey Program

The NSW Patient Survey Program began surveying patients in NSW public facilities from 2007. From 2007 to mid-2012, the program was coordinated by the NSW Ministry of Health using questionnaires obtained under license from NRC Picker. Ipsos Social Research Institute Ltd (Ipsos) was contracted to manage the logistics of the survey program. Responsibility for the Patient Survey Program was transferred from the Ministry of Health to the Bureau of Health Information (BHI) in July 2012, with Ipsos continuing as the contracted partner to manage the logistics.

The aim of the survey program is to measure and report on patients' experiences of care in public health facilities in New South Wales (NSW), on behalf of the NSW Ministry of Health and the local health districts (LHDs). The results are used as a source of performance measurement for individual hospitals, LHDs and NSW as a whole.

This document outlines the sampling methodology, data management and analysis of the 2015-16 Small and Rural Emergency Department Patient Survey (SREDPS).

For information on the development of this questionnaire, please refer to the Development Report at bhi.nsw.gov.au/nsw_patient_survey_program

More information is also available through the BHI website on how to interpret results and whether differences in the results between hospitals, LHDs or NSW are statistically different.

Organisational roles in producing survey samples

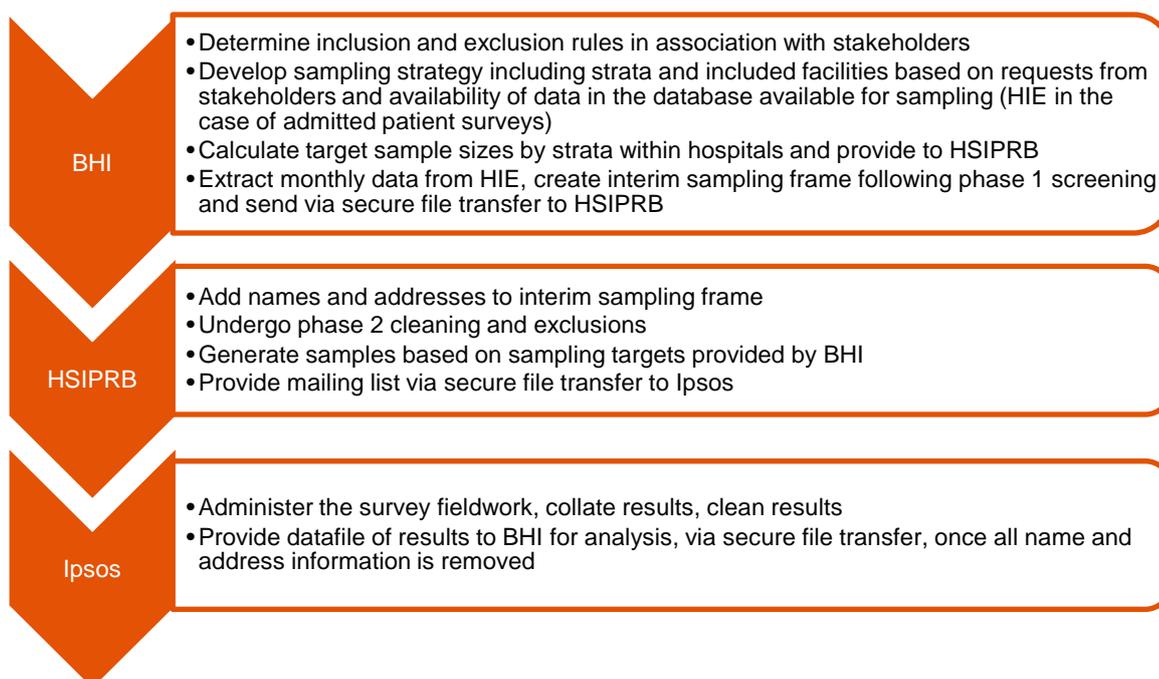
The survey program assures patients that their responses will be confidential and that staff at hospitals will not be able to determine who gave which response. BHI does this through a number of mechanisms, including:

- Data suppression (results based on fewer than 30 responses are suppressed)
- Reporting aggregated results
- Anonymisation of patient comments
- Segregation of roles when constructing the survey samples (see below).

The sampling method for the survey program is a collaboration between BHI, Ipsos and the Ministry of Health's Health Systems Performance Information and Reporting Branch (HSPIRB) (see Figure 1). All surveys of admitted patients use data obtained from the Health Information Exchange (HIE).

BHI has access to de-identified unit record data from selected tables of the HIE database. Use of an encrypted patient number allows deduplication at the patient level within a hospital. For the SREDPS, sampling frames are defined separately for each month, with the date of discharge used to define eligible records. Sample sizes for each included hospital are calculated in advance, as defined later in this report.

Figure 1: Organisational responsibilities in sampling and survey processing, Small and Rural Emergency Department Patient Survey 2015-16



Inclusion criteria

Phase 1 screening

Emergency department patient data pass through two phases of cleaning. The first phase of screening is applied by BHI. Many of these criteria are developed in conjunction with advice of stakeholders.

Inclusions

- Patients who visited an emergency department in a NSW public hospital with a peer group classification of D1a, D1b, D2 and F3.

Exclusions

- Patients who were dead on arrival or died in ED (mode of separation of 8 and 3 respectively) were excluded from the sample.

A series of further exclusion criteria were applied to take into account a range of factors including: the potentially high vulnerability of particular patient groups and/or patients with particularly sensitive reasons for admission; certain patients' ability to answer questions about their experiences; and the relevance of the survey questions to particular patient groups.

The effectiveness of this screening is reduced for the EDPS compared to the Adult Admitted Patient Survey (AAPS) due to the variables in the dataset. For example, the ED dataset does not contain robust diagnosis (ICD-10-AM) information that allows these exclusions. Because of this, further screening to exclude sensitive groups can only be done for patients subsequently admitted to hospital. In addition, ED patients subsequently admitted to hospital (mode of separation of 1,10,11,12 or 13) with the following procedures or diagnoses that were recorded for their inpatient stay were omitted:

- admitted for a termination of pregnancy procedure [35643-03];
- treated for maltreatment syndromes [T74] in any diagnosis field, including neglect or abandonment, physical abuse, sexual abuse, psychological abuse, other maltreatment syndromes and maltreatment syndrome, unspecified;
- treated for contraceptive management [Z30] in any diagnosis field, including general counselling and advice on contraception, surveillance of contraceptive drugs, surveillance of contraceptive device, other contraceptive management and contraceptive management, unspecified;
- patients with a diagnosis of stillborn baby [Z37] in any diagnosis field (including single stillbirth, twins, one liveborn and one stillborn, twins, both stillborn and other multiple births, some liveborn) were excluded.
- In addition, where ED patients were admitted to hospital, they were excluded if in the subsequent admission they had a mode of separation of death.

From October 2014, the following additional exclusions were applied:

- Intentional self-harm: ICD10 code between X60 and X84
- Sequelae of intentional self-harm: ICD10 code = Y87.0
- Unspecified event, undetermined intent: ICD10 code commences with Y34
- Suicidal ideation: ICD10 code = R45.81
- Family history of other mental and behavioural disorders: ICD10 code commences with Z81.8

- Personal history of self-harm: ICD10 code commences with Z91.5.

Where patients had multiple visits within the sampling month, their most recent hospital visit was kept. The questionnaire asks patients to respond to the survey based on their most recent ED visit in a particular month.

Phase 2 screening

BHI provides the interim sampling frame to HSIPRB, who add patient name and address information. Data then undergo a second phase of screening. This involves exclusions for administrative/logistical reasons, or where death had been recorded after discharge for the stay used for sample selection but before the final sampling frame is prepared.

Exclusions

- Invalid address (including those with addresses listed as hotels, motels, nursing homes, Community Services, Mathew Talbot hostel, 100 William Street, army quarters, jails, unknown, NFA)
- Invalid name (including twin, baby of, etc.)
- Invalid date of birth
- On the 'do not contact' list
- Sampled in the previous six months for any BHI patient survey currently underway
- Had a death recorded according to the NSW Birth Deaths and Marriages Registry and/or Agency Performance and Data Collection, prior to the sample being provided to Ipsos.

The data following these exclusions are defined by BHI as the final sampling frame.

Drawing of the sample

Survey design

The dataset obtained following Phase 2 screening is referred to as the final sampling frame. It includes eligible patients admitted to public facilities with a peer group classification of D1a, D1b, D2, F3 (except for APAC services) that reported 100 or more admissions in the state-wide HIE system during the 2014 calendar year.

A stratified sample design was applied, with each facility being defined as a stratum. Simple random sampling without replacement (SRSWOR) applied within each facility.

Although sampling is undertaken monthly, sample sizes are calculated to determine numbers over a 12 month period, as this is the period on which reporting is based.

Calculation of sample sizes and reporting frequency

The monthly sample sizes are determined ahead of time, based on data extracted from the HIE for the previous 12 month period using the same phase 1 screening as is applied during monthly sampling.

Equation 1 is used to estimate the sample size. Values used in this equation aim to provide a sample size that will give a confidence interval of ± 0.07 around an expected proportion of 0.8.

$$s_i = \frac{\chi^2 NP(1-P)}{d^2(N_i-1) + \chi^2 P(1-P)} \times \frac{1}{r_i} \quad (1)$$

Where:

s_i = desired sample size for reporting based on sampling for 12 months, for facility i

χ^2 = tabulated value of chi-squared with one degree of freedom at 5% level of significance (3.841)

N_i = population in facility i during the previous year

P = expected proportion giving positive response to the question on satisfaction with overall care (0.8), based on previous levels of response to patient surveys

d = degree of accuracy of the 95% confidence interval expressed as a proportion (± 0.07)

r_i = expected response rate in facility i

The estimated sampling size is divided evenly by 12 and provided to HSIPRB as monthly survey targets. For each month of sampling, HSIPRB randomly selects patients within each facility, with the aim of achieving the targets provided by BHI. The desired targets may not be reached in all facilities because the targets are calculated based on historic interim sampling frame data and prior to the phase 2 screening. If the response rate is lower than anticipated or if the prevalence of the variable of interest is between 20 and 80%, the confidence interval may be wider than ± 0.07 . BHI reserves the right to suppress results where the response rate is lower than a particular level.

Data Management

Data collection

Upon completion of a survey questionnaire, the respondent returns or submits the completed survey (depending on whether they completed the paper-based questionnaire or the online questionnaire) to Ipsos. If a paper form is returned, Ipsos then scans in the answers electronically and manually enters free text fields.

Once all of the data are collated into a single dataset, all names and addresses are removed from the dataset. Also, all text entry fields are checked for potential identifiers (names of patients, names of doctors, telephone numbers, etc.) and any that are found are replaced with "XXXX".

Following this, each record is checked for any errors in completion. Where necessary, adjustments are made such as removing responses where the patient has not correctly followed questionnaire instructions or where the respondent has provided multiple answers to a single response question.

At the end of this process, Ipsos uses a secure NSW Ministry of Health system to transfer the data from their servers to BHI's secure servers, all of which are password protected with limited staff access.

At no stage does BHI, who analyse the data, have access to the names and contact details of the respondents. This ensures respondent answers remain confidential and identifying data can never be publicly released.

Data Analysis

Completeness of survey questionnaires

The level of survey completeness was high overall, with respondents answering, on average, 65 out of the 92 questions. Over 90% of respondents answered up to 73 questions.

Response rate

The overall response rate was 44%, ranging from 21% to 36% at the LHD level and 7% to 43% at hospital level. Response rates at the LHD and facility levels are provided in Tables 4 and 5 respectively, later in the document.

Weighting of data

During the planning phase of the Small and Rural Emergency Department Patient Survey, it was decided against sampling patients by age group and stay type within facilities because the majority of patients in these facilities are in the 49+ age group, and facilities generally do not cater for same day admissions.

Responses from the survey still needed to be weighted to ensure that results at the LHD and state level take into account the different sampling proportions used at the facility level.

Weighting was performed at facility level using equation (2)

$$w_i = \frac{N_i}{n_i} \quad (2)$$

Where:

N_i denotes the total number of patients eligible for the survey of the i^{th} facility.

The eligible patient numbers are based on the number of patients following the second phase of screening undertaken by the Ministry of Health.

n_i denotes the number of respondents of the i^{th} facility.

Analysis of weights

As part of the weighting process, an investigation of the weights is undertaken to ensure that undue weight is not applied to individual responses. The two most important factors considered are the ratio of the maximum to median weight, and the design effect. The design effect (DEFF) is estimated as $(1 + \text{coefficient of variance (weights)}^2)$, and estimates the variance of estimates obtained from the stratified sample used with the variance expected for a simple random sample. Sample sizes, response rates and DEFFs at the LHD and NSW level are shown in Table 4 and sample sizes and response rates at the facility level are shown in Table 5. For this survey, all respondents within a facility will have the same weight.

Table 1: Number of facilities, sample size, response rates and design effects (DEFF) by LHD and overall, SREDPS 2015-16

LHD	Surveys Mailed	Survey Responses	Weighted Response Rate	DEFF
Hunter New England	6460	1964	30%	1.4
Mid North Coast	436	156	36%	1.0
Murrumbidgee	7544	2258	30%	1.2
Northern NSW	2313	551	24%	1.5
Southern NSW	2411	779	32%	1.2
Western NSW	6305	1335	21%	1.2
NSW	25469	7043	28%	1.4

At the LHD level, the DEFFs are low compared with the Adult Admitted Patient Survey, with the maximum being 1.5. In LHDs that are represented by a single facility there will be no variability in the weights. The LHDs with the largest DEFFs are those that have a large number of facilities. It is also affected by the range in patient volumes across the facilities within the LHD. In general the increase in standard errors caused by the survey design (and leading to a larger DEFF at LHD level) is more than offset by the fact that each facility that is sampled has sufficient sample size to allow facility-level reporting. In addition, the estimates at the LHD level have appropriate apportionment of respondents between large and small facilities, and there is no need to censor larger weights.

Table 5 also provides the peer group for each facility. For reporting purposes, there are 4 peer groups in Healthcare Observer.

Table 2. Peer group, sample sizes and response rates by hospital, SREDPS 2015-16

Facility name	Original Peer Group	Surveys Mailed	Survey Responses	Weighted Response Rate	DEFF
<i>Facilities reported quarterly</i>					
Cootamundra Health Service	D1a	550	191	35%	1.0
Corowa Multi-Purpose Service	D1a	578	186	32%	1.0
Glen Innes District Hospital	D1a	570	159	28%	1.0
Gloucester Soldier's Memorial Hospital - Hospital Unit	D1a	527	192	36%	1.0
Leeton Health Service	D1a	580	102	18%	1.0
Narrandera Health Service	D1a	515	140	27%	1.0
Pambula District Hospital	D1a	591	177	30%	1.0
Scott Memorial Hospital, Scone	D1a	567	171	30%	1.0
Temora Health Service	D1a	547	168	31%	1.0
Bulahdelah District Hospital	D1b	513	203	40%	1.0
Byron District Hospital	D1b	604	99	16%	1.0
Cobar District Hospital	D1b	543	102	19%	1.0
Coonabarabran District Hospital	D1b	552	160	29%	1.0
Finley Health Service	D1b	365	114	31%	1.0
Gulgong Multi-Purpose Service	D1b	422	124	29%	1.0
Holbrook Multi Purpose Service	D1b	263	112	43%	1.0
Mullumbimby & District War Memorial Hospital	D1b	593	129	22%	1.0
Murrumburrah-Harden Multi-Purpose Service	D1b	217	67	31%	1.0
Prince Albert Memorial, Tenterfield	D1b	380	96	25%	1.0
Quirindi Community Hospital	D1b	546	152	28%	1.0
Tomaree Community Hospital	D1b	600	185	31%	1.0
Walgett Multi-Purpose Service	D1b	389	29	7%	1.0
Wee Waa District Hospital	D1b	266	43	16%	1.0
Wellington Hospital, Bindawalla	D1b	574	115	20%	1.0
Wyalong Health Service	D1b	498	146	29%	1.0
Yass Health Service	D1b	579	165	28%	1.0

Facility name	Original Peer Group	Surveys Mailed	Survey Responses	Weighted Response Rate	DEFF
<i>Facilities reported annually</i>					
Barham Multi-Purpose Service	D2	353	119	34%	1.0
Coonamble Multi-Purpose Service	D2	493	79	16%	1.0
Crookwell Health Service	D2	558	212	38%	1.0
Dungog District Hospital	D2	420	159	38%	1.0
Gundagai Multi-Purpose Service	D2	358	116	32%	1.0
Hay Health Service	D2	342	79	23%	1.0
Hillston Multi-Purpose Service	D2	201	56	28%	1.0
Lockhart Multi-Purpose Service	D2	128	48	38%	1.0
Manilla Multi-Purpose Service	D2	495	130	26%	1.0
Molong Multi-Purpose Service	D2	235	88	37%	1.0
Narromine District Hospital	D2	438	89	20%	1.0
Tocumwal Multi-Purpose Service	D2	217	62	29%	1.0
Wilson Memorial Community Hospital, Murrurundi	D2	144	46	32%	1.0
Barraba Multi-Purpose Service	F3	303	96	32%	1.0
Bingara Multi-Purpose Service	F3	212	53	25%	1.0
Blayney Multi-Purpose Service	F3	210	60	29%	1.0
Bombala Multi-Purpose Service	F3	302	86	28%	1.0
Boorowa Multi-Purpose Service	F3	208	68	33%	1.0
Bourke Multi-Purpose Service	F3	437	52	12%	1.0
Braidwood Multi-Purpose Service	F3	381	139	36%	1.0
Brewarrina Multi-Purpose Service	F3	237	22	9%	1.0
Coolamon Multi-Purpose Service	F3	261	82	31%	1.0
Culcairn Multi-Purpose Service	F3	188	69	37%	1.0
Dorrigo Plateau Multi-Purpose Service	F3	436	156	36%	1.0
Gilgandra Multi-Purpose Service	F3	499	135	27%	1.0
Guyra Multi-Purpose Service	F3	406	124	31%	1.0
Henty Multi-Purpose Service	F3	159	60	38%	1.0
Junee Multi-Purpose Service	F3	403	104	26%	1.0
Kyogle Multi-Purpose Service	F3	568	187	33%	1.0
Lake Cargelligo Multi-Purpose Service	F3	313	64	20%	1.0
Lightning Ridge Multi-Purpose Service	F3	314	56	18%	1.0
Nimbin Multi-Purpose Service	F3	548	136	25%	1.0
Nyngan Multi-Purpose Service	F3	403	90	22%	1.0
Rylstone Multi-Purpose Service	F3	230	67	29%	1.0
Tumbarumba Multi-Purpose Service	F3	300	105	35%	1.0
Walcha Multi-Purpose Service	F3	319	113	35%	1.0
Warialda Multi-Purpose Service	F3	192	42	22%	1.0
Warren Multi-Purpose Service	F3	329	67	20%	1.0

Demographic characteristics of respondents to SREDPS

One of the aims of weighting is to ensure that after weighting the characteristics of the respondents closely reflect the characteristics of the patient population. Table 6 shows the percentages by actual patient volumes as well as for the unweighted and weighted survey results, by various demographic breakdowns.

Two patient population figures are shown. The first column refers to the patient population prior to the phase 2 screening process. The second column refers to the eligible patient population, from which the sample was selected.

The weighted percentage of respondents in each LHD and peer group is consistent with the proportions in the eligible patient population. It should be noted that the proportion of respondents in the 18-49 year age strata is less than half of the proportion in the eligible population, whether weighted or unweighted. This is partly due to a much lower response rate for younger patients. A similar effect is observed for Aboriginal patients.

Table 3 Demographic characteristics of patients and SREDPS respondents 2015-16

Demographic variable	Sub-group	% in patient population	% in MoH* eligible population	% of respondents (Unweighted)	% of respondents (Weighted)
LHD	HNELHD	25	26	28	26
	MNCLHD	1	1	2	1
	MLHD	25	25	32	25
	NNSWLHD	16	16	8	16
	SNSWLHD	11	13	11	13
	WNSWLHD	21	19	19	19
Age group	Under 18	25	N/A#	19	21
	18-49	37	N/A#	16	17
	50+	38	N/A#	65	62
Visit type	Admitted Emergency	12	N/A#	7	7
	Non-admitted Emergency	88	N/A#	93	93
Peer group	D1a	22	24	21	24
	D1b	39	39	29	39
	D2	13	13	18	13
	F3	25	24	32	24
Aboriginal or Torres Strait Islander	No	89	N/A#	96	96
	Yes	11	N/A#	4	4
Gender	Male	51	N/A#	50	49
	Female	49	N/A#	51	52

*MoH = NSW Ministry of Health; #Sample summaries provided by MoH are summarised only by strata variables. As gender, Aboriginal status, age group and visit type were not strata variables, this information was not available at this point in the process.

Reporting

Confidentiality

BHI does not receive any confidential patient information. The process of mailing surveys and collation of responses are carried out by Ipsos Social Research Institute (Ipsos) on behalf of BHI. All personal identifiers, such as name, address etc., are removed from the data before it is provided to BHI.

To further ensure that respondents are not identifiable, BHI only publishes results that include a minimum of 30 respondents. For facilities or LHDs where there are too few respondents, results are suppressed. Only aggregated data are published – unit record data are never published in BHI reports.

Statistical Analysis

Data were analysed for the period from November 2015 to February 2016. Analysis was undertaken in SAS V9.4 using the SURVEYFREQ procedure, with hospital as a stratum. Results were weighted for all questions except for questions related to socio-demographic characteristics and self-reported health.

Results were generated for each question in the survey

- At NSW level, and by LHD, peer group and hospital
- Within each of these, by the following demographic characteristics:

Characteristic	Comment
Age group	18-34,35-54,55-74,75+, based on self-report. Where question on year of birth is missing or invalid, administrative age was used
Self-reported gender	Where question on sex is missing or invalid, administrative data used
Education	Response “Still at secondary school” was combined with “Less than Year 12”
Country of birth	Australia born vs. Others
Main language spoken at home	English vs. Others
Rurality of hospital (NSW only)	Based on Remoteness category of location of facility
Long-standing health conditions	Dichotomised as reported a health condition or none reported
Aboriginal status	Self-reported, dichotomised into Aboriginal and/or Torres Strait Islander or neither. Missing values were excluded rather than imputed from administrative source
Self-reported health	
Quintile of socio-economic disadvantage	Refer to the Data Dictionary: Quintile of socio-economic disadvantage
Rurality of patient residence	Based on Remoteness category of postcode of respondent

For a detailed breakdown of the proportion of missing or ‘Don’t know’ responses for each question, refer to Appendix 1.

Typically, for questions that are related to hospital performance, missing values and ‘Don’t know/can’t remember’-type responses are excluded. The exception is for ‘Don’t know/can’t remember’ responses for questions that ask about a third party (e.g. if family had enough opportunity to talk to doctor) or that are over 10%.

Meanwhile, questions that are not related to hospital performance include results for people who responded 'Don't know/can't remember' and those who should have answered the question but did not. Results are presented only where the result was based on at least 30 respondents.

Confidence intervals

Confidence intervals can be displayed in Healthcare Observer for the most positive response option for questions related to hospital performance (with the exception of questions experiencing complications, where confidence intervals are shown for the least positive response option). 95% confidence intervals are based on modified Clopper-Pearson (exact) confidence limits for proportions, as calculated in SAS during the SURVEYFREQ procedure.

The BHI document, "Guide to Interpreting Differences" provides additional information in understanding comparison of results.

Some differences in results between hospitals may be due to differences in the demographic profile of patients attending those facilities. BHI is currently developing methods to standardise survey results in order to account for differences in patient mix and to optimise direct comparisons.

Appendix 1: Percentage of missing and ‘Don’t know’ responses

These data are sourced from the Small and Rural Emergency Department Patient Survey 2015-16. Data are unweighted.

Question number	Question text	Missing %	Don't know %	Missing + don't know %*
1	What was your main form of transport to the ED?	2.0		2.0
2	Was there a problem in finding a parking place near to the ED?	1.3		1.3
3	Was the signposting directing you to the ED of the hospital easy to follow?	2.1		2.1
4	Overall, did the ambulance crew treat you with respect and dignity?	1.4	1.4	2.9
5	How would you rate how the ambulance crew and ED staff worked together?	2.2	1.9	4.1
6	Did the ambulance crew transfer information about your condition to the ED staff?	1.9	7.2	9.1
7	Overall, how would you rate the care you received from the ambulance service?	2.2	1.4	3.6
8	Were the staff you met on your arrival to the ED polite and courteous?	1.3	1.0	2.3
9	Did staff who met you on arrival give you enough information about what to expect during your visit?	1.0	3.0	4.1
10	Did staff who met you on arrival tell you how long you would have to wait for treatment?	2.7	6.0	8.7
11	Was the waiting time given to you by staff who met you on arrival about right?	3.8	1.8	5.6
12	Did you experience any of the following issues when in the waiting area? [with seating, noise, temperature or odour in the waiting area]	5.8		5.8
13	From the time you first arrived at the Emergency Department (ED), how long did you wait before being triaged by a nurse - that is, before an initial assessment of your condition was made?	3.4	3.3	6.7
14	Did you stay until you received treatment?	3.1		3.1
15	Why did you leave the ED before receiving treatment?	5.7	1.4	7.1
16	After triage (initial assessment), how long did you wait before being treated by an ED doctor or nurse?	7.8	3.5	11.2
17	While you were waiting to be treated, did ED staff check on your condition?	1.6	6.2	7.8
18	While you were waiting to be treated, did your symptoms or condition get worse?	1.2	4.1	5.3
19	Did the ED doctors know your medical history, which had already been given to the triage nurse or ambulance crew?	5.5	5.5	11.0
20	Did you have confidence and trust in the ED doctors treating you?	1.2		1.2
21	Were the ED doctors polite and courteous?	1.7		1.7
22	Overall, how would you rate the ED doctors who treated you?	1.6		1.6
23	Did the ED nurses know your medical history, which had already been given to the triage nurse or ambulance crew?	5.4	6.9	12.3
24	Did you have confidence and trust in the ED nurses treating you?	0.5		0.5
25	Were the ED nurses polite and courteous?	0.6		0.6
26	Overall, how would you rate the ED nurses who treated you?	0.8		0.8
27	Did the ED health professionals introduce themselves to you?	4.8	3.3	8.1
28	Did the ED health professionals explain things in a way you could understand?	4.7		4.7
29	During your visit to the ED, how much information about your condition or treatment was given to you?	4.7		4.7
30	Were you involved, as much as you wanted to be, in decisions about your care and treatment?	5.3		5.3

Question number	Question text	Missing %	Don't know %	Missing + don't know %*
31	If your family members or someone else close to you wanted to talk to the ED staff, did they get the opportunity to do so?	5.5	2.1	7.6
32	How much information about your condition or treatment was given to your family, carer or someone else close to you?	5.7	2.8	8.5
33	Were you able to get assistance or advice from ED staff for your personal needs (e.g. for eating, drinking, going to the toilet, contacting family)?	5.5		5.5
34	How would you rate how the ED health professionals worked together?	5.3		5.3
35	Did you ever receive contradictory information about your condition or treatment from ED health professionals?	7.2		7.2
36	Were the ED health professionals kind and caring towards you?	5.7		5.7
37	Did you feel you were treated with respect and dignity while you were in the ED?	5.6		5.6
38	Were you given enough privacy during your visit to the ED?	5.8		5.8
39	Were your cultural or religious beliefs respected by the ED staff?	6.8		6.8
40	Did you have worries or fears about your condition or treatment while in the ED?	6.0		6.0
41	Did an ED health professional discuss your worries or fears with you?	4.8		4.8
42	Were you ever in pain while in the Emergency Department (ED)?	5.8		5.8
43	Do you think the ED health professionals did everything they could to help manage your pain?	2.8		2.8
44	Did you see ED health professionals wash their hands, or use hand gel to clean their hands, before touching you?	5.2	14.2	19.4
45	How clean were the waiting and treatment areas in the ED?	5.1		5.1
46	How safe did you feel during your visit to the ED?	5.3		5.3
47	Were there things for your child to do (such as books, games and toys)?	16.1	5.5	21.6
48	Was the area in which your child was treated suitable for someone of their age group?	14.3		14.3
49	Did the ED staff provide care and understanding appropriate to the needs of your child?	14.4		14.4
50	During your visit to the ED, did you have any tests, X-rays or scans?	7.8	2.5	10.4
51	Did an ED health professional discuss the purpose of these tests, X-rays or scans with you?	1.6	1.4	3.0
52	Did an ED health professional explain the test, X-ray or scan results in a way that you could understand?	2.2		2.2
53	What happened at the end of your visit to the Emergency Department (ED)?	5.8		5.8
54	Did you feel involved in decisions about your discharge from hospital?	2.9		2.9
55	Thinking about when you left the ED, were you given enough information about how to manage your care at home?	2.1		2.1
56	Did ED staff take your family and home situation into account when planning your discharge?	2.5	1.8	4.3
57	Thinking about when you left the ED, were adequate arrangements made by the hospital for any services you needed?	2.4		2.4
58	Did ED staff tell you who to contact if you were worried about your condition or treatment after you left hospital?	3.0	7.6	10.6
59	Thinking about your illness or treatment, did an ED health professional tell you about what signs or symptoms to watch out for after you went home?	3.8		3.8
60	Were you given or prescribed any new medication to take at home?	2.5		2.5
61	Did an ED health professional explain the purpose of this medication in a way you could understand?	1.6		1.6
62	Did an ED health professional tell you about medication side effects to watch for?	2.7		2.7
63	Did you feel involved in the decision to use this medication in your ongoing treatment?	2.0		2.0
64	Did an ED health professional tell you when you could resume your usual activities, such as when you could go back to work or drive a car?	2.4		2.4
65	Was your departure from the ED delayed - that is, before leaving the ED to go to a ward, another hospital, home, or elsewhere?	6.3		6.3
66	Did a member of staff explain the reason for the delay? [in discharge]	8.0		8.0

Question number	Question text	Missing %	Don't know %	Missing + don't know %*
67	What were the main reasons for the delay? [in discharge]	7.8	3.1	11.0
68	Overall, how would you rate the care you received while in the ED?	2.6		2.6
69	If asked about your experience in the ED by friends and family how would you respond?	2.8		2.8
70	Did the care and treatment received in the ED help you?	2.9		2.9
71	In total, how long did you spend in the ED? (from when entered until left to go to a ward/another hospital/home/elsewhere)	3.4	5.2	8.6
72	Did you want to make a complaint about something that happened in the ED?	2.9		2.9
73	Why didn't you make a complaint?	8.2		8.2
74	Were you ever treated unfairly for any of the reasons below?	5.3		5.3
75	Not including the reason you came to the ED, during your visit, or soon afterwards, did you experience any of the following complications or problems?	5.0		5.0
76	Was the impact of this complication or problem ...?	5.8		5.8
78	What year were you born?	2.7		2.7
79	What is your gender?	2.0		2.0
80	Highest level of education completed	4.8		4.8
81	Which, if any, of the following long-standing conditions do you have (including age related conditions)?	4.1		4.1
82	In general, how would you rate your health?	2.3		2.3
83	Language mainly spoken at home	1.8		1.8
84	Aboriginal and/or Torres Strait Islander	4.0		4.0
85	What were your reasons for going to the ED?	6.0		6.0
86	Was your visit to the ED for a condition that, at the time, you thought could have been treated by a General Practitioner (GP)?	3.8		3.8
87	In the month before visiting the ED, did you ...?	3.6	9.7	13.3
88	Before your visit to the ED, had you previously been to an ED about the same condition or something related to it?	3.4		3.4
89	Who completed this survey?	2.6		2.6
90	Do you give permission for the Bureau of Health Information to link your answers from this survey to health records related to you (the patient)?	3.9		3.9

* Percentages for this column may not equal the sum of the "Missing %" and "Don't know %" columns because they were calculated using unrounded figures.

For respondents who did not answer these questions, information about age and gender were substituted with age and sex fields from administrative data (from the Health Information Exchange).

Appendix 2: Derived measures

Definition

Derived measures are those for which results are calculated indirectly from respondents' answers to a survey question. These tend to be from questions that contain a 'not applicable' type response option and are used to gather information about the array of patients' needs.

Derived measures involve the grouping together of more than one response option to a question. The derived measure 'Quintile of Disadvantage' is an exception to this rule (for more information on this, please see the appropriate Data Dictionary for this measure).

Statistical methods

Results are expressed as the percentage of respondents who chose a specific response option or options for a question. The reported percentage is calculated as the numerator divided by the denominator (see definitions below).

Results are weighted as described in this report.

Numerator

The number of survey respondents who selected a specific response option or specific response options to a certain question, minus exclusions.

Denominator

The number of survey respondents who selected any of the response options to a certain question, minus exclusions.

The following questions and responses were used in the construction of the derived measures.

Derived Measure	Original Question	Derived Measure Categories	Original Question Responses
Needed parking near the ED	Q2. Was there a problem in finding a parking place near to the ED?	<ul style="list-style-type: none"> Needed parking 	<ul style="list-style-type: none"> Yes, a big problem Yes, a small problem No problem
		<ul style="list-style-type: none"> Didn't need parking 	<ul style="list-style-type: none"> I did not need to park
Spent time in the waiting area	Q12. Did you experience any of the following issues when in the waiting area? [with seating, noise, temperature or odour in the waiting area]	<ul style="list-style-type: none"> Spent time in waiting area 	<ul style="list-style-type: none"> I couldn't find somewhere to sit The seats were uncomfortable It was too noisy It was too hot It was too cold There were bad or unpleasant smells
		<ul style="list-style-type: none"> Wasn't in waiting area 	<ul style="list-style-type: none"> No, I did not experience these issues I did not spend time in the waiting area
		<ul style="list-style-type: none"> Saw a triage nurse 	<ul style="list-style-type: none"> I was triaged immediately
		<ul style="list-style-type: none"> Didn't see a triage nurse 	<ul style="list-style-type: none"> 1-15 minutes 16-30 minutes 31-59 minutes 1 hour to under 2 hours 2 hours or more
		<ul style="list-style-type: none"> Didn't see a triage nurse 	<ul style="list-style-type: none"> I did not see a triage nurse
Received treatment from a doctor	Q19. Did the ED doctors know your medical history, which had already been given to the triage nurse or ambulance crew?	<ul style="list-style-type: none"> Saw a doctor 	<ul style="list-style-type: none"> Yes, definitely Yes, to some extent No
		<ul style="list-style-type: none"> Didn't see a doctor 	<ul style="list-style-type: none"> I wasn't treated by a doctor
Received treatment from a nurse	Q23. Did the ED nurses know your medical history, which had already been given to the triage nurse or ambulance crew?	<ul style="list-style-type: none"> Saw a nurse 	<ul style="list-style-type: none"> Yes, definitely Yes, to some extent No
		<ul style="list-style-type: none"> Didn't see a nurse 	<ul style="list-style-type: none"> I wasn't treated by a nurse
Needed information about condition or treatment	Q29. During your visit to the ED, how much information about your condition or treatment was given to you?	<ul style="list-style-type: none"> Needed information 	<ul style="list-style-type: none"> Not enough The right amount Too much
		<ul style="list-style-type: none"> Didn't need information 	<ul style="list-style-type: none"> Not applicable to my situation

Wanted to be involved in decisions about care and treatment	Q30. Were you involved, as much as you wanted to be, in decisions about your care and treatment?	<ul style="list-style-type: none"> Wanted involvement 	<ul style="list-style-type: none"> Yes, definitely Yes, to some extent No
		<ul style="list-style-type: none"> Didn't want involvement 	<ul style="list-style-type: none"> I was not well enough to be involved I did not want or need to be involved
Had family/someone close who wanted to talk to staff	Q31. If your family members or someone else close to you wanted to talk to the ED staff, did they get the opportunity to do so?	<ul style="list-style-type: none"> Wanted to talk to staff 	<ul style="list-style-type: none"> Yes, definitely
		<ul style="list-style-type: none"> Not applicable 	<ul style="list-style-type: none"> Yes, to some extent No, they did not get the opportunity
		<ul style="list-style-type: none"> Not applicable 	<ul style="list-style-type: none"> Not applicable to my situation
Had family/someone close who wanted information about condition or treatment	Q32. How much information about your condition or treatment was given to your family, carer or someone else close to you?	<ul style="list-style-type: none"> Wanted information 	<ul style="list-style-type: none"> Not enough
		<ul style="list-style-type: none"> Not applicable 	<ul style="list-style-type: none"> Right amount Too much
		<ul style="list-style-type: none"> Not applicable 	<ul style="list-style-type: none"> It was not necessary to provide information to any family or friends
Needed assistance or advice from ED staff for personal needs	Q33. Were you able to get assistance or advice from ED staff for your personal needs (e.g. for eating, drinking, going to the toilet, contacting family)?	<ul style="list-style-type: none"> Needed assistance 	<ul style="list-style-type: none"> Yes, always Yes, sometimes No
		<ul style="list-style-type: none"> Didn't need assistance 	<ul style="list-style-type: none"> I did not need assistance or advice
Had religious or cultural beliefs to consider	Q39. Were your cultural or religious beliefs respected by the ED staff?	<ul style="list-style-type: none"> Had beliefs to consider 	<ul style="list-style-type: none"> Yes, always Yes, sometimes No, my beliefs were not respected
		<ul style="list-style-type: none"> Beliefs not an issue 	<ul style="list-style-type: none"> My beliefs were not an issue
Needed things for child to do (such as books, games and toys)	Q47. Were there things for your child to do (such as books, games and toys)?	<ul style="list-style-type: none"> Child needed things to do 	<ul style="list-style-type: none"> There were plenty of things for my child to do There were some things, but not enough There was nothing for my child's age group There was nothing for children to do
		<ul style="list-style-type: none"> Not applicable 	<ul style="list-style-type: none"> Not applicable to my child's visit
		<ul style="list-style-type: none"> Not applicable 	<ul style="list-style-type: none"> Not applicable to my child's visit
Received results of test, X-ray or	Q52. Did an ED health professional explain the test,	<ul style="list-style-type: none"> Told results 	<ul style="list-style-type: none"> Yes, completely

scan results while in ED	X-ray or scan results in a way that you could understand?		<ul style="list-style-type: none"> • Yes, to some extent • No
		<ul style="list-style-type: none"> • Not told results in ED 	<ul style="list-style-type: none"> • I was not told the results while in ED
Wanted or needed to be involved in decisions about discharge	Q54. Did you feel involved in decisions about your discharge from hospital?	<ul style="list-style-type: none"> • Wanted involvement 	<ul style="list-style-type: none"> • Yes, definitely • Yes, to some extent
		<ul style="list-style-type: none"> • Didn't want involvement 	<ul style="list-style-type: none"> • No, I did not feel involved • I did not want or need to be involved
Needed information on how to manage care at home	Q55. Thinking about when you left the ED, were you given enough information about how to manage your care at home?	<ul style="list-style-type: none"> • Needed information 	<ul style="list-style-type: none"> • Yes, completely • Yes, to some extent
		<ul style="list-style-type: none"> • Didn't need information 	<ul style="list-style-type: none"> • No, I was not given enough • I did not need this type of information
Needed family and home situation taken into account when planning discharge	Q56. Did ED staff take your family and home situation into account when planning your discharge?	<ul style="list-style-type: none"> • Had situation to consider 	<ul style="list-style-type: none"> • Yes, completely • Yes, to some extent
		<ul style="list-style-type: none"> • Not necessary 	<ul style="list-style-type: none"> • No, staff did not take my situation into account • It was not necessary
Wanted or needed to be involved in decisions about medication	Q63. Did you feel involved in the decision to use this medication in your ongoing treatment?	<ul style="list-style-type: none"> • Wanted involvement 	<ul style="list-style-type: none"> • Yes, definitely • Yes, to some extent
		<ul style="list-style-type: none"> • Didn't want involvement 	<ul style="list-style-type: none"> • No, I did not feel involved • I did not want or need to be involved
Experienced complication or problem during or shortly after ED visit	Q75. Experienced complication or problem during or shortly after ED visit (derived measure)	<ul style="list-style-type: none"> • Had complication 	<ul style="list-style-type: none"> • An infection • Uncontrolled bleeding • A negative reaction to medication • Complications as a result of tests or procedures • Severe pain due to the treatment • A blood clot • A fall • Any other complication or problem
		<ul style="list-style-type: none"> • None reported 	<ul style="list-style-type: none"> • None of these • Missing
Complication or problem occurred during ED visit	Q77. In your opinion, were members of the hospital staff open with you about this complication or problem?	<ul style="list-style-type: none"> • Occurred in ED 	<ul style="list-style-type: none"> • Yes, completely • Yes, to some extent • No
		<ul style="list-style-type: none"> • Occurred after left 	<ul style="list-style-type: none"> • Not applicable, as it happened after I left